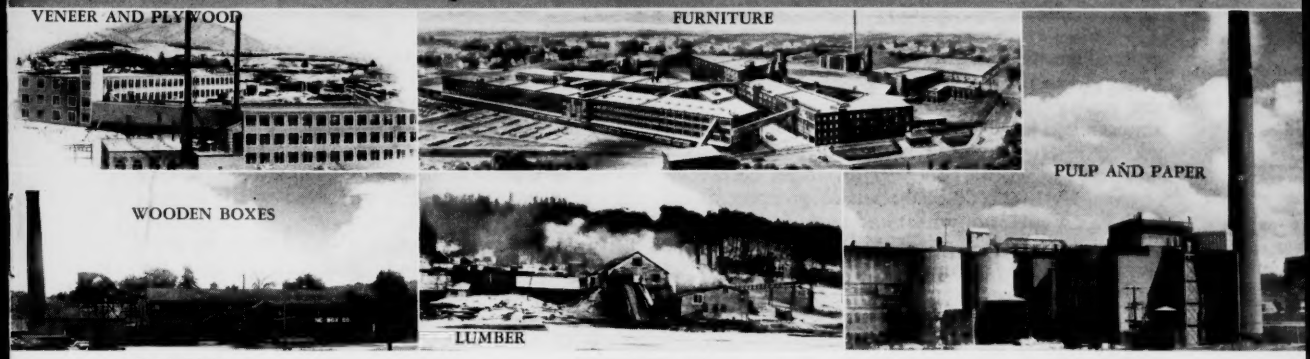
Monthly Review Federal Reserve Bank of Boston



VOLUME 30 AUGUST 1948 NUMBER 8

Wood-Using Industries in New England

WHITHER FOOD PRICES?

Some observations on tomorrow's menu, showing that food prices are likely to go up before they come down.

A CONSUMER does not need a theoretical analysis with a statistical gloss to interpret his grocery bill. If he reduced his eating to simple necessities and robbed it of many pleasures, he could purchase an adequate and healthful diet at about half his present food bill even at current prices. However, people do like to eat well and they can now afford to buy all of the quality food that currently can be produced. Despite high prices the markets are cleaned out and the cost of living has been rising. Everyone is complaining about high prices but no one seems to be able to do anything about them, except pay them.

Food prices are not an isolated, independent part of the whole price structure any more than the human mouth is independent of the hand that feeds it. Because the aim of Government agricultural price programs is to keep agricultural prices closely tied to the general level of prices and thus maintain farm purchasing power, any substantial drop in food prices must await a decline in the whole price structure.

On the other hand, increases and decreases in the supply of farm products on the market do not occur quickly with the rise and fall of prices. For this reason movements in food prices accumulate momentum, a phenomenon which sets them somewhat apart from other prices. This can be illustrated by the recent rise in prices of livestock which have not produced an immediate increased supply of meat, eggs, and dairy products. The reason for this is obvious. Six months must elapse between the time the chick is hatched and the hen is old enough to lay. From the breeding of the dam until the daughter produces milk 38 months are required, while, similarly, the supply of beef cattle could be expanded only after a period of 28 months. Ten months are needed to breed and produce market weight hogs. These figures assume that high prices have not drawn to the slaughter pens a large portion of the breeding stock which would produce these new animals.

In general, the problem of food prices can be broken down into a question of the supply, wholesale prices to farmers, distribution costs, and consumer demand. Within this framework operates the classic mechanism of supply, the ability of price to affect that supply, and the willingness and capacity of people to buy that supply. However, in considering the prices of farm products there must be at least one assumption about a completely independent factor — weather.

Beginning with the problem of supply, grain is the king-pin of the cost of producing food. Foods directly dependent on the grain supply account for over 30 per cent of the Bureau of Labor Statistics' Consumer Price Index and 73 per cent of the value of food items in that index. Of these, the feed grains (corn, oats, barley, and sorghums) alone are basic to 53 per cent of the food items in the index. The simple reason for the importance of the feed grains is that they, along with hay, are translated into food for human consumption through the complex mechanism of livestock. It is the cow, the hen, and the pig that make corn, oats, barley, and the sorghums important in the human diet.

From this it is clear why a short corn crop in 1947 in conjunction with a continued high domestic

demand meant high prices for milk, meat, eggs, and poultry. Corn is by all odds the most important of the feed grains. A contributing factor was the abnormally large European demand for wheat, which otherwise would have been available as a substitute for corn. This year a bumper corn crop of over 3,501,000,000 bushels is in prospect along with heavy yields of wheat and oats. But this does not mean that food prices will fall immediately. The bottleneck is the number of livestock available to convert this feed into food.

Livestock Dwindling

The 1948 spring pig crop was the lowest since 1941. The fall pig crop is expected to be one per cent lower than the crop of last year. There are two reasons for this apparent paradox of high prices for hogs and pork and continuing low production. In spite of record high prices in 1947 and 1948, even higher corn prices up to mid-1948 made the feeding and raising of pigs relatively unprofitable. An optimist might argue that now, with a prospect of a 10 to 15 per cent increase in feed supplies for livestock, pork prices could drop immediately. The conflict between optimism and reality in this statement lies in the word immediately.

In addition to this, farmers may hold pigs on their farms next fall to feed them to heavier weights with the result that a considerable proportion of hogs that might have been marketed in the fall will not be sold for slaughter until January or later. All of this adds up to a continued shortage of pork through this summer and fall.

Underlying the problem of beef prices is the fact that total cattle numbers in the United States have been declining steadily since the all-time peak of January 1, 1945. By January 1, 1948, this had amounted to a decrease of eight per cent. By itself that figure of eight per cent is not particularly significant for the immediate future, although it does indicate a continuing short supply for some time to come. The important point for the immediate future is the amount of cattle that will be available for market within the next six months to a year.

The supply of beef in the butcher shops depends on three primary sources, of which the first is the most important: Cattle from the feed lots of the middle west, cattle fattened on the grasslands of the range states, and discarded dairy cows. On July 1 there were 25 per cent fewer cattle being fed for market than there were at that time last year. While there was an upturn in May, since last January shipments of cattle from the range states to be fattened on the feed lots of Corn Belt farms were 36 per cent less than last year's shipments. Moreover, these cattle will not be fully fitted for market until 1949.

Whether cattle are shipped directly from the range states to the packer's slaughter pens or shipped to the Corn Belt for further fattening depends to a large degree on the price of corn. If corn is cheap and beef high, it pays cattle feeders to buy the range cattle and feed them corn to increase their weight and quality. The outlook is now for relatively low corn prices with the result that Corn Belt feeders will bid in a large proportion of the grass-fattened cattle. By contrast, in the fall of 1947, as a result of the short corn crop, many grass cattle were slaughtered rather than sent to the feed lots, a situation which contributed to the current shortage of grain fed cattle.

Dairy cattle numbers have been decreasing more rapidly than beef cattle numbers. As a result, the number of cows of this type available for slaughter is also lower than previously.

All of this adds up to one conclusion: Even though animal prices are 10 per cent higher than they were at the first of the year and may even rise higher, meat consumption will continue below the 1947 level because of the short supply coming to market. While it is estimated that per capita meat consumption in 1948 will be 115 per cent of the 1935–39 average, it will be but 93 per cent of per capita consumption in 1947. Translated into pounds this means a drop from 155.2 pounds of meat per person in 1947 to 145 pounds per person in 1948. In the last quarter of 1948 it is estimated that consumption will be three to four pounds per person less than it was in the final quarter of last year.

The outlook for poultry supply and prices is similar to that for hogs. The number of pounds of poultry feed a dozen eggs would buy or a pound of poultry meat would buy has been for some months considerably lower than the 1927–46 average, and also below the ratio prevailing last year. The result of this low return to poultry and egg producers has been that in May there were fewer chickens on farms than at any time since 1940, 12 per cent below the long-range average. In May egg production was two per cent below that of a year ago while on July 1 there were 14 per cent fewer chickens of the current hatch on farms than there were a year ago. More favorable returns from raising chickens as a result of lower feed costs cannot be translated into more eggs and poultry for consumers until new flocks have been hatched and raised, a process that takes about seven months for eggs and three months for broilers.

Milk Prices Up

Milk cow numbers are the lowest since 1939 and milk production on farms so far this year was four per cent below 1947. While on the average retail fluid milk prices in July were 12 per cent over the July 1947 prices, consumption of fluid milk and cream remains substantially unchanged. The primary reason for the stable consumption is the high level of consumer spendable income. The price increases were granted by milk control authorities largely to compensate for higher costs of feed grains. From spring of 1947 until the drop in grain prices this spring, the ratio between feed costs and milk prices was generally considerably below the 1927–46 average. By July this ratio improved to a point slightly above the 20-year average for the month and considerably above that of the same

month a year ago. The reason for this change to a more favorable ratio was the decrease in grain prices and an increase in retail fluid milk prices.

Unfortunately from the consumer's point of view this change in the ratio of feed prices to milk prices comes at the end of a year of high feed costs in relation to milk prices that caused a decline in production. Considerable time must elapse before more favorable milk-feed ratio can be reflected in greater production.

How Soon Can Food Supplies Be Increased?

Food Commodity	Gestation Period	Growing for Production or Fitting for Market	Weight in Cost of Living Index
Beef[1]	283 days	14–29 months	4.5
Veal[1]	283 days	4–5 weeks	0.7
Pork	114 days	7–8 months	3.6
Poultry			
Broilers and Roosters	3 weeks	2–6 months	1.5
Eggs	3 weeks	6 months	2.6
Dairy Products[1]	283 days	28 months	8.7
Butter			(3.0)
Cheese			(0.8)
Fresh Milk			(4.4)
Evaporated Milk			(0.5)
Cereal and Bakery Products	9 months*		5.6

*Growing season.

[1] Because of the depletion of beef and dairy breeding stock approximately four to five years will probably elapse before substantial increases in supplies will be available.

Source: Bureau of Labor Statistics as of September 15, 1946.

This far the discussion has been concerned with the supply of food products. The second factor in the cost of food is wholesale prices. Underlying the prices of agricultural products is the price support program of the Federal Government. For this year and next, price supports at 90 per cent of parity[1] are designed to maintain basic commodity prices at relatively high levels regardless of the supply or increase them further if prices paid rise. After that date price supports are scheduled to be adjusted to supply and the lower costs resulting from increased efficiency of production.

Wheat, for example, will be supported on the principal markets at $2.24 to $2.29 a bushel, levels very close to present futures prices. These support prices are based on 90 per cent of the parity price at the farm which was $2.22 a bushel on June 15. One year ago parity for wheat at the farm was $2.03 a bushel.

Higher support prices stem from higher parity and higher parity in turn comes from higher costs of the things farmers must buy. These living and production costs depend largely on nonfarm prices, which in their turn are affected by profits, material costs, and wages. Wages in their turn depend in considerable part upon the cost of living, which is itself partly the result of farm prices. Thus the cost of living feeds on itself!

Of primary importance in the price-cost relationship is the trend. Wholesale prices to farmers create the price incentive to increase supply. The larger the percentage of markup between the wholesale price and the retail price, the less influence the consumer's dollar has on production. Since December 1947, marketing charges between farmer and consumer on the annual food purchases for a family of three have increased 11 per cent. Meanwhile, the farmer's share of the consumer's dollar has sunk to the lowest point since 1942 but is still far above earlier periods.

There remains the final element in determining the level of food costs: demand. There is no indication of a general slackening of demand for most farm products, although demand for some individual commodities may slacken. Employment remains at a very high level and personal income is rising. A not insignificant factor in demand for food products is the increased size of the armed forces. The high dietary standards of the military services will provide an increased proportion of the population with a greater amount of short supply livestock products than they would have consumed as civilians.

The demand for food products is determined not only by food purchases but also by the demand for and supply of other consumer goods. During World War II when consumer durable goods were scarce a larger than normal share of consumer income was spent on foods, the most readily available goods on the market. Today consumer durables are still scarce, and with the accelerated defense program it is probable that many of these items most in demand such as automobiles and housing will be for some time beyond the reach of many consumers. Thus it is not unreasonable to assume that wartime pressures on food supply in lieu of other consumer purchases will continue.

When all of the factors — supply of basic farm products, prices received by farmers, distribution costs, and consumer demand — are balanced, the result would seem to indicate possible further increases in retail food prices by fall and no substantial decline before mid-1949. It is important to remember, however, that none of these factors are static. They can change drastically and quickly — e.g., because of weather, a drop in employment, imposition of Government controls, etc., — with the result that their total effect may be markedly different from what is here anticipated. This discussion of supply, distribution costs, demand, and their effects upon food prices had as a starting point the assumption that such changes will not occur.

As a conclusion it reaches this point — that food prices are an inextricable part of the whole price structure. But for the eccentricities of its own orbit agricultural price will follow in the movement of the whole constellation of prices. The direction still seems to be up.

[1] Parity price is a device which relates the price of farm products to the prices of items making up farm costs so that the prices a farmer receives will pay for the same amount of goods they would have bought in a given base period, usually 1909–1914. The support price under present legislation is usually 90 per cent of the parity price. This is the price which the Government guarantees to the farmer either by buying goods on the market at that price or by taking his crop as security for a loan for a sum which is based on 90 per cent of the parity price.

Nature's Self-Stocking Warehouse

*The Forest Supplies Basic Raw Materials for New England's Diversified Wood-Using Industry**

FORESTRY in New England is a big business owned by small businessmen.

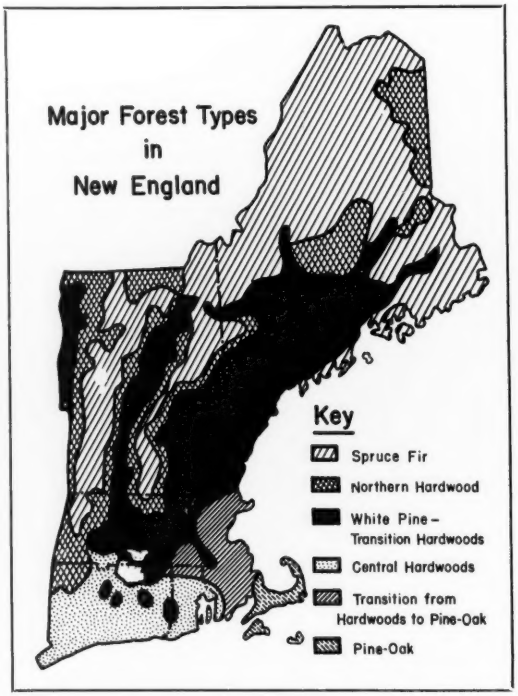
It is a big business from the standpoint of size and the aggregate volume of business transacted. It is big because it supports a flourishing and very profitable wood-using industry. It has an opportunity to grow even bigger with proper management.

A majority of New England forest land is owned by persons whose holdings comprise less than 5,000 acres. These holdings average 72 acres each and aggregate 17.7 million acres (or 60 per cent) of the total of 29.1 million acres of privately-owned forest land in the area. Of 244,000 separate ownerships, 243,700 are in small holdings. Only 194 ownerships are in medium-sized holdings (5,000 to 50,000 acres) and only 45 are in large holdings (more than 50,000).

Therefore, not a handful but thousands of landowners stand to profit by improvement and expansion of forestry in New England.

Less than five per cent of New England's 31 million acres of forest land is publicly owned. Slightly more than half of the public ownership is in national forests while the balance is mainly owned by states, cities, and towns.

Articles made from wood have always been useful and still continue to be. One hundred cubic feet per capita per year is a reasonable estimate of New England's consumption of forest products in the form of lumber, paper, and other things made of wood, including fuel. This is an aggregate of 850 million cubic feet. Of this, about 630 million, or 74 per cent, comes out of New England's own forests, 160 million as cordwood for fuel. New England is, however, a net importer of wood in the form of lumber in excess of half of its average annual consumption of more than two billion board feet.[1] However, New England's dependence on outside sources may have decreased somewhat during 1946 and 1947 when the national lumber demand-supply ratio resulted in annual lumber cuts in New England approaching 1.5 billion board feet. As previously brought out, New England's forests are ill-prepared to withstand this upsurge.



Also, forests are subject to attacks by disease and insects; forest fires, mainly of human origin, take annual tolls; high winds break and uproot trees; and ice storms, animals, and other destructive agents cause much damage. The accompanying chart shows the breakdown of the normal expectation of total annual drain of 761 million cubic feet of wood from New England's forests.

What benefit does New England derive from the products it takes out of its forests each year? First, it gets many things directly useful in the daily lives of its inhabitants: houses and other buildings that are wholly or partly made of lumber; furniture made from lumber and plywood; writing, wrapping, book, and newsprint paper; barrels and kegs; boxes; posts and poles, and tool and implement handles, to name a few. Its manufacturing and service industries get lumber, bobbins, shoe lasts, pallets, barrels, boxes, crates and other shipping containers, railroad crossties, and many other integral or accessory elements of their products.

[1] Between 1922 and 1942 not less than 30 nor more than 53 per cent of softwood and not less than 48 nor more than 74 per cent of hardwood lumber consumed came from local forests, according to the U. S. Forest Service.

* Second of three articles on New England's forest assets based upon a study conducedt by the Northeastern Wood Utilization Council under a research grant from this bank.

"*Wooden Dollars*", the Council's report, will be published soon by the Federal Reserve Bank of Boston and copies will be available without charge.

In terms of real income to the region the contribution of the forests is a substantial sum. The forest-based industries — which would be largely nonexistent were it not for the local forests — in 1939 gave employment to nearly 100,000 people, almost nine per cent of the total, whom it paid more than $112 million, 8.4 per cent of the regional payroll. They made products worth $456 million, 9.3 per cent of all products manufactured, and accounted for a value added by manufacture of $208 million, 8.5 per cent of the total of all New England industry.

Wood-Using Industries

The pulp and paper industry is located in New England largely because the forests supply its basic raw material — pulpwood. This industry, together with its allied products, ranks first in value of manufactured products in Maine, third in New Hampshire, and seventh in New England, the total equaling $330 million in 1939, nearly three-quarters of that of all forest-based industries in the region.

Containing only 6.5 per cent of the population of the United States, New England produced 13.5 per cent of the total paper and paperboard output of the country in 1943. In specific categories, New England did much better, producing 56 per cent of the newsprint, 42 per cent of the special industrial papers, 32 per cent of the groundwood printing and specialty papers, and large proportions of other types and grades in the higher price classes. In 1939 New England's paper and paperboard production had an average value of $81.55 per ton compared with an average value of $62.84 for the country as a whole.

Of the 644 paper and paperboard mills in the United States, 168 are located in New England. The region also has 38 pulp mills, most of which are operated in connection with paper mills. Plant, machinery, and equipment investment in New England pulp and paper mills was estimated at $625 million in 1946. Capital investment per employee in this industry is $18,500 in the United States as a whole, more than in any other industry.

New England's furniture industry, a large wood consumer, employed nearly 30,000 people in 1939 and put out products worth more than $90 million. Value of product in the lumber industry was $17.3 million, of which $10 million was value added by manufacture. Forest land owners are receiving an average annual income from sale of stumpage amounting to around $25 million on the basis of conservatively estimated average stumpage values.

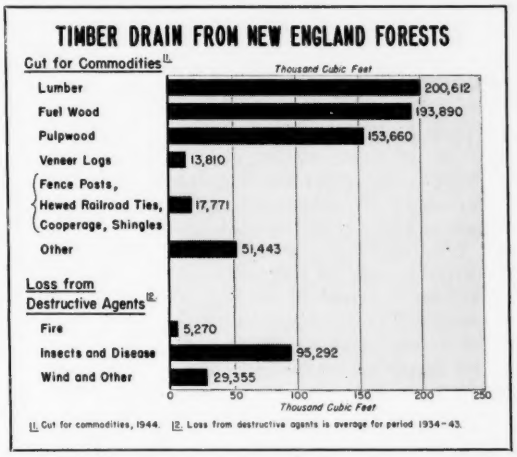
New England's forests derive a strong competitive advantage through their nearness to the great Atlantic seaboard consuming areas. For example, it is only 376 miles from Portland, Maine, to New York City. This advantage is well illustrated by the prices New England sawmills receive for lumber. The lumber produced in New Hampshire in 1940 brought the sawmills an average price of $23.44 per thousand feet. At the same time sawmills in Oregon were receiving an average price of only $20.91 for a higher average grade of lumber.

Attack on Waste Problem

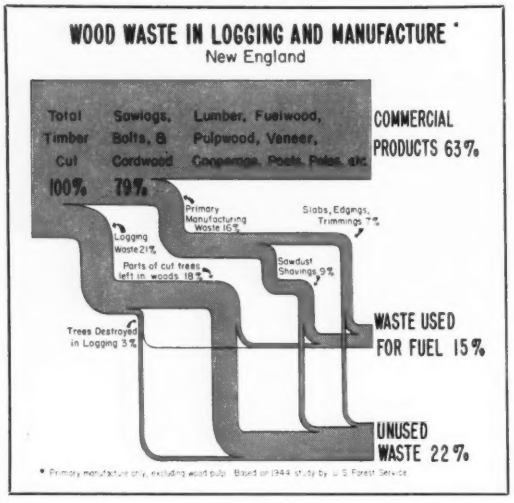
With some justification the wood-using industries have been accused of wastefulness, though much of the so-called wastage has in the past consisted largely of discarding material for which economic use had not been developed or which could not pay its way to the market.

The chart on page six indicates the extent and form of wood waste in New England and where it occurs. Of the 631 million cubic feet of wood cut for commodity use in 1944, only 400 million, a little less than two-thirds, was made into commercial items. Somewhat less than half of the balance (not to be confused with cordwood) was used as fuel in the wood-fabricating plants, but 22 per cent found no economic use whatsoever.

Until entirely new mechanical methods are developed, wood-working will produce sawdust and shavings. Since logs are round and lumber must have a rectangular cross section, the production of slabs is inevitable. Bark is of little or no use under present economic and operating conditions. Chemical pulping processes used in paper making remove the lignin which may comprise as much as a third of the wood volume by weight. Sulfate and soda mills recover the lignin from the liquor and use it as fuel, but sulfite mills dump it into the rivers. Widespread and comprehensive research directed at discovering economic uses for lignin is under way. About three million tons of lignin are either dumped or burned each year in the United States. The stream-pollution aspect of this is obvious.



Increasing labor costs are not conducive to the fussy and often awkward processes involved in efforts to utilize the waste from woods, sawmill, and wood-working plant operations. Bulk is an added limitation to the transportation necessary to concentrate waste materials in economically usable quantities. This is particularly true in New Eng-


WOOD WASTE IN LOGGING AND MANUFACTURE *
New England
Total Timber Cut 100%
Sawlogs, Bolts, & Cordwood 79%
Lumber, Fuelwood, Pulpwood, Veneer, Cooperage, Posts, Poles, etc.
COMMERCIAL PRODUCTS 63%
Logging Waste 21%
Primary Manufacturing Waste 16%
Slabs, Edgings, Trimmings 7%
Parts of cut trees left in woods 18%
Sawdust Shavings 9%
Trees Destroyed in Logging 3%
WASTE USED FOR FUEL 15%
UNUSED WASTE 22%
* Primary manufacture only, excluding wood pulp. Based on 1944 study by U. S. Forest Service

land where individual plants are relatively small and widely scattered.

Nevertheless, much progress in waste reduction has been made and is continuing as new uses and new methods are discovered. But the waste problem still stands in the forefront of conditions needing correction if the potential economic benefits of New England's forest resources are to be fully realized in the future.

Greater Publicity Needed

By far the greatest loss of economic benefit from New England's forests is unrealized productive capacity. The current annual growth of 58 board feet of sawtimber and one-quarter of a cord of smaller material per acre is far below good forestry standards. It could be at least three times these figures and the ultimate potential, under intensive scientific management, is far higher. There is evidence, supported by credible studies of growth and yield, that, if all the forests were fully stocked,[2] it would be possible to grow more than 11 billion board feet annually on the area that now yields 1.8 billion feet. This would be at the rate of nearly 400 board feet per acre per year, seven times the current growth.

New England's forests are badly deficient in quantity production but they are equally, or even more, deficient in the quality of material produced. Quality is the main consideration impelling New England lumber buyers to place their orders outside the region. This is not because New England's forests are incapable of producing high-grade lumber. The fact that they are capable of producing such lumber makes improvement of forest quality an integral element of the long-range forestry program. Run-down forests, of which New England has too many, do not measure up to adequate quality standards, but correction will be automatic as forest management methods are improved.

[2] Stocking refers to the volume of growing stock per acre, age and size considered.

Paradoxically, New England's forests contain at present too many trees. What they need in general is not more trees but larger trees. They also need a better species composition — less of the species of low commercial utility and a good deal more of the types that yield lumber competitive with that now being imported. Large trees of the right species inevitably yield lumber competitive both as to quality and kind. To the extent that it is practicable, forestry in New England should aim at maximum production of the softwood species adapted to a wide variety of uses. This is not meant to imply that hardwood production should be neglected. Very important industries are dependent upon supplies of hardwood material but the status of the softwoods, particularly the white pine, is currently far more critical than that of the hardwoods. This is true in spite of the fact that hardwood veneer and plywood manufacturers are encountering increasing difficulty in supplying their plants with suitable logs and bolts.

New England's annual forest growth exceeds the cut, fire and insect losses, and other drains by 18 per cent, or 136 million cubic feet. This favorable condition is seriously impaired, however, by the fact that the annual removal of sawtimber-size trees is 77 million cubic feet (22 per cent) greater than the growth. Softwood sawtimber is losing ground at the rate of nearly 100 million cubic feet (500 million board feet) yearly.

The excess of growth is occurring on trees so small that, unless forest management methods are improved, they will not reach cutting size in time to close the gap and maintain a continuous supply of sawtimber to support the current rate of cutting.

Nature is slow and indifferent to man's immediate economic needs. She does not concern herself particularly with the production of commercially-valuable species. Neither does she mind if growth stagnates because too many small trees compete with each other.

Good forest management calls for an increase in the rate of cutting of small trees in the form of thinnings, weedings, and improvement cuttings to accelerate growth, increase the proportion of desired species, and improve the quality of the final crop trees. Such operations will result in the production of wood far beyond the absorptive capacity of the fuelwood market.

Though some owners are applying such treatment to their young forests, it cannot be expected that the practice will become widespread until markets for relatively small, low-grade material offer at least the chance of defraying the cost.

Forests are probably New England's most important natural resource. They are contributing importantly to the region's economic welfare but this contribution is only a fraction of what it can be if adequate action is taken in time.

Next month's *Monthly Review* will tell what is being done to improve and expand forestry in New England. More importantly, it will tell what is not being done but which must be done if essential goals are to be approached.

Information Please . . .

Quarterly Inventory of Economic Research Is Sourcebook for Facts and Figures about New England

CENTRALIZED research information in New England has become a reality since the inauguration in June 1947 of the *Quarterly Inventory of Economic Research* by the Federal Reserve Bank of Boston.

Serving as an economic source book for the New England area, the *Inventory* has brought together more than 300 research studies in a classified listing. Numerous requests for copies of the studies listed have been received by the agencies conducting the studies from all over the country, an indication that the *Inventory* is being utilized by industries in other sections which are interested in doing business in New England.

Reduces Duplication

Not only is the *Inventory* providing manufacturers and others with useful information relating to New England, but it is promoting greater coordination and reducing duplication of research related to the New England area.

It was with these objectives in mind that the *Inventory* was begun a year ago June. The first edition listed special studies which were started or completed during the period July 1946 to April 1947. Subsequent compilations have been prepared each quarter.

The *Inventory* is as varied in scope as New England's economy. It lists studies on a wide variety of subjects ranging from the cost of food to freight rates on fish. It attempts to list all major research studies pertaining to such matters as wage rates in New England industries, cost of living, marketing possibilities in the area, progress of building construction, agriculture, and numerous other phases of the area's economy.

The *Quarterly Inventory of Economic Research* has been coordinated with the *Source Book of New England Economic Statistics* compiled in 1946. It serves as a supplement to the original publication by keeping an up-to-date record of new statistical series and economic studies on a quarterly basis.

How Compiled

Here is how the *Inventory* is compiled. A questionnaire is sent to potential contributors requesting a list of research projects which require over one man-week of preparation. After the reports of statistical and economic research are submitted to the bank by research agencies or individual research workers, the information is classified and assembled. Then the statistical and research data are listed in the *Quarterly Inventory* along with the completion date and the source from which the information may be obtained. Specific phases of each study are summarized so that the casual observer may get a quick picture of current New England research. Most of the information and the conclusions of the investigations may be obtained by request from the agency doing the research. The *Inventory* includes a directory of contributors so that inquiries may be directed to the source.

Of the 500 individuals and organizations receiving the composite report of investigations in our district each quarter, 175 are outside New England. Schools, colleges, universities, federal, state and local governmental agencies, research institutions, industrial establishments, and libraries in New York, Pennsylvania, Ohio, Indiana, Illinois, and 22 other states west of New England are affiliates. Requests for the *Quarterly Inventory* have been received from The Netherlands and Hawaii. To three of the Canadian Provinces go copies of the compilation regularly. Over 800 copies of the *Quarterly Inventory* are distributed by the bank. One research agency receives 35 copies for the use of its scattered representatives.

The bank is cooperating in this undertaking with the Committee on Economic Research of The New England Council, headed by Nicholas E. Peterson, vice-president of The First National Bank of Boston. Membership comprises leaders in New England industrial research, each being the head of a research organization or a research committee. Serving on the committee are representatives from each of the six New England State Development Commissions.

Readers who are interested in receiving the *Quarterly Inventory of Economic Research* regularly may do so by writing to the Research and Statistics Department, Federal Reserve Bank of Boston, 30 Pearl Street, Boston 6, Massachusetts.

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N. E. Member Banks Show Lower Net Profits

MOST New England member banks reported further declines in net profits at the end of 1947 despite larger gross earnings. This pattern shown by the member banks in this district is similar to that shown for the nation's banks. In general, the principal reasons for the results were the same — a heavy reduction in security profits and rising expenses of operations.

An analysis of the income and expense reports for the year 1947 of 248 First District member banks makes possible certain generalizations about changes which have occurred not only in the sources of income and distribution of expenses but also in the relative proportion of earnings and expenses. The banks considered include 74 per cent of the number and hold over 97 per cent of the deposits of all member banks in the district.

The average net profit in 1947 for all reporting banks was 6.9 per cent of slightly increased capital funds as compared with 8.8 per cent in 1946. There were only small differences between banks doing primarily a savings as distinguished from a commercial banking business. In general, the smaller banks obtained a higher rate of earnings on capital funds than the larger banks. Current returns on capital funds approximate the levels of the late twenties and are slightly above the average level of the late 1930-early 1940 period. As a percentage of total earnings, the average net profit was 22.5 per cent — off about eight points from 1946.

Declines Unequally Distributed

The declines in net profits both in relation to capital funds and as a percentage of total earnings were not distributed equally throughout the banking population. The changes, however, were less marked than those which occurred between 1945 and 1946. The larger banks sustained the greatest decreases in their net profits-capital funds ratio, while the downward change in the net profits-earnings ratio was borne most heavily by the largest and the smallest banks outside Boston. Declines in security profits were most marked in banks outside the city which held more than $5 million of deposits. A larger proportion of earnings was consumed by expenses at practically all of the banks.

The volume of recoveries previously charged off was somewhat lower at the small banks than at the larger ones and slightly below the 1946 levels for the group as a whole. Net charge-offs were proportionately greater at the banks in Boston than elsewhere in the district; all banks showed increases for the year. Although the increase in net charge-offs was not relatively large, it is significant because it marks the second successive year since 1943 in which losses and charge-offs exceeded profits on securities and recoveries. Few banks were able to take advantage of the late 1947 ruling of the Bureau of Internal Revenue which permitted setting up valuation reserves against loan losses based upon the loss experience of the past 20 years and to deduct these reserves in computing their incomes subject to tax. Had they been in a position to do so, net charge-offs would have been substantially higher.

Reduced taxable net profits resulted in lower income taxes for the larger banks, principally those with deposits of $50 million and over. The lower taxes moderated the disadvantageous factors somewhat. Income taxes at the smallest banks tended to increase, largely reflecting payment of income taxes on a "cash basis".

Trends and Sources of Earnings

Aggregate earnings of district banks increased about four per cent. Boston banks reported a decline of about two per cent and the banks outside an increase of 7.5 per cent over 1946. The bulk of the increase was accounted for by an additional proportion of income received from interest and discount on loans. This increment, however, was substantially offset by the decline in the proportion of interest earned on U. S. securities. The divergent trends of these two basic sources of earnings have moved rapidly from the turning point in 1945. At that time earnings on U. S. securities accounted for over 50 per cent of the total and earnings on loans and discounts about 30 per cent. In 1947 earnings on loans constituted 42 per cent and interest on U. S. securities 35 per cent of the total. The earnings on the higher-yield commercial, real estate, and consumer loans surpassed those on U. S. securities for the first time since 1942.

Rates of return on funds loaned by Boston banks averaged 2.87 per cent, slightly higher than the year before. At the banks outside, the rate remained unchanged at 4.6 per cent. The rate differential between Boston and outside banks reflects the frequency of small loans, which carry higher rates, in the portfolios of the outside banks.

The average yield on U. S. securities was 1.77 per cent at the banks outside and 1.47 per cent in Boston. Generally, the average rate of return on U. S. securities showed an inverse relationship to the size of the bank, reflecting the holdings by the smaller banks of bonds with longer maturities.

Service charges on deposit accounts continued as a profitable source of earnings, increasing 21 per cent over the year and representing over eight per cent of total earnings. It was the third most important source of earnings for banks with deposits of $25 million or less and at the smaller banks accounted for as much as 15 per cent of total earnings.

Trust department earnings were large for cer-

tain institutions, but were unevenly distributed throughout the banks as a group. At banks with deposits of $25 million and over these earnings ranked third in importance.[1]

Expenses, Dividends, Capital Funds

New England member bank expenses were up about 10 per cent for the year, reflecting the increased cost of doing business in 1947. Among the expense items, disbursements for salaries and wages and increased personnel accounted for the major portion. Banks of virtually all deposit-size classes reported increased proportions of total earnings were required for salaries and wages. In Boston almost 40 per cent of earnings were expended for this purpose and at banks outside 31 per cent, representing an increase in both areas.

While time deposits continued to increase, the proportion of total earnings disbursed for payments of interest on these accounts remained the same although more dollars were spent.

Other expenses were generally higher both absolutely and relatively, but showed no significant changes in the proportion of earnings absorbed.

These developments in expense trends caused net current earnings as a percentage of total earnings to decline moderately even though the dollar volume of earnings was four per cent larger than it was in 1946. Boston banks reported a net current earnings ratio of 32.5 per cent compared with 36 per cent in 1945 and banks outside 32.9 compared with 34.5.

Cash dividends paid by the banks remained on a conservative basis. Slightly more than 54 per cent of net profits were distributed, amounting to $16.2 million. Boston banks distributed about 71 per cent of net profits and the banks outside about 41 per cent. The payments in dollars exceeded those last year by a small margin and kept pace with the slight increase in capital funds during 1947. As a percentage of capital funds, the ratio was 3.53 at Boston and 2.61 outside, practically unchanged from 1946.

Real estate assets now amount to only 11 per cent of member bank capital accounts compared with 21 per cent in 1940. This decline reflects in part the sale of other real estate, regular depreciation charges, and substantial charge-offs.

Earnings, Expenses, Profits, 1948

For the first half of 1948 net profits of all New England member banks aggregated $12.7 million. This was a decrease of $4 million, or 24 per cent, from the semi-annual peak reached in the corresponding period of 1947 and a decrease of $400 thousand under the net profits of the second half of last year. This decline was brought about largely by a sudden upward surge in the volume of charge-offs because most of the banks are now taking advantage of the ruling of the Bureau of Internal Revenue concerning valuation reserves.

Charge-offs were increased $10.8 million, or 207 per cent, and amounted to $16 million at banks throughout the district — increases of about 300 per cent in Boston and 152 per cent at the banks outside. Recoveries were $4.5 million greater than during the corresponding period last year, up about 75 per cent to $10.5 million. Net charge-offs were thus $5.5 million.

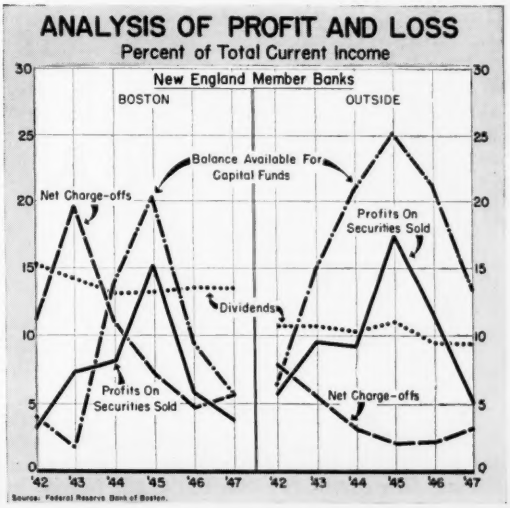
Dividend payments aggregated about the same amounts and absorbed over 60 per cent of the smaller net profits. Additions to capital, after allowance for the increased valuation reserves, however, were about the same as in past periods.

Total earnings of the banks continued to grow, increasing about $4 million, or six per cent — the rate of increase being about twice as great at the banks outside compared with those in Boston.

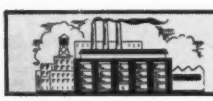
Current expenses continued upward, increasing about $3.7 million, or 8.3 per cent. Salaries and wages accounted for about 33 per cent of the total earnings and 50 per cent of total current expenses.

Earnings for the balance of 1948 may improve slightly over those reported in the first half. There will be no significant change, however, unless there is a substantial expansion in loans during the remainder of the year. Monetary policy is presently directed to restricting credit to essential needs. One favorable factor in the earnings outlook is that rates for both prime and less-than-prime borrowers are undergoing further firming. The rate of earnings on securities will also improve slightly as the result of the recent increase in rates on U. S. certificates.

Operating expenses are difficult to predict but certainly are likely to continue to be heavy and may show further advances. Some banks have consolidated certain operations with a view to greater efficiency, and others have failed to replace employees lost through normal turnover in an attempt to stabilize salary and wage outlays. Continued increases in industrial wage payments, together with rising prices, may force sympathetic action on salary increases or adjustments for bank personnel.



[1] See *Monthly Review*, June 1948 for detailed analysis of trust earnings and expenses.



Business Conditions

Business Still Subject to Inflationary Pressure

As Demand Outpaced Improved Supply the Recent Upsurge in Prices Forced Them Back into Attention

PRICE problems dominated the economic situation at mid-year. The basic lack of balance between supply and demand still exists and continues to exert its inflationary pressure.

Most wholesale prices have gone up recently. Advances have been especially sharp for livestock, meats, and metals. These advances have been more than sufficient to offset declines for cotton, grains, and some chemicals, and have raised the general wholesale commodity price index above its 1920 peak to a new all-time record.

Consumer prices were already generally above their 1920 peaks. They moved even higher as additional advances were recorded for meats, eggs, dairy products, and fuels.

Because of a sharply accelerated demand and timing lags, increased potential and actual supplies have not been sufficient to slow down the rise in prices. Record or near-record crops are in sight for wheat, corn, oats, cotton, and potatoes. Industrial production, in general, is practically at peacetime record levels, and further expansion is limited by available facilities. Many manufactured products which were recently in short supply are now available in sufficient quantities to meet normal demand. Shoes, print cloth, sheetings, fine paper, and some electrical appliances are examples. Designers are promoting style changes to stimulate apparel sales. Tires are piling up in warehouses for lack of automobiles on which to mount them.

Two major exceptions to the improving supply situation are meats and metal products. Meat shortages stem back to deficiencies of livestock on the farms and ranges. Supplies of metal products are dependent upon production of steel and other basic metals, and they in turn are dependent upon a reliable supply of coal for fuel.

The demand for commodities from current output has increased even faster. Total disposable income of individuals is the greatest ever, and has been enhanced by reduced income taxes as well as by "third round" wage increases. Corporate profits are being drawn on to finance needed capital expenditures. Government commitments for defense and for foreign aid are huge.

When available liquid assets and current income have been insufficient to provide the required buying power, they have been supplemented by credit. Outstanding consumer credit has passed beyond its prewar peak. Commercial, industrial, agricultural, and real estate loans have been steadily increasing.

Increased income, reduced savings, and expanded credit add up to a demand for commodities which continues to outpace supply. Ignoring a few of the sicker industries, the trends of manufacturing, wholesale and retail sales are still upward with increasing prices. Sales of department stores, seasonally adjusted, reached an all-time high in June.

This level of effective demand for the current supply of goods sustains the upward pressure on the price structure, and in the economist's language signifies inflation. The situation is aggravated by present price determining forces which permit advances but which aggressively resist declines when supply conditions warrant such declines.

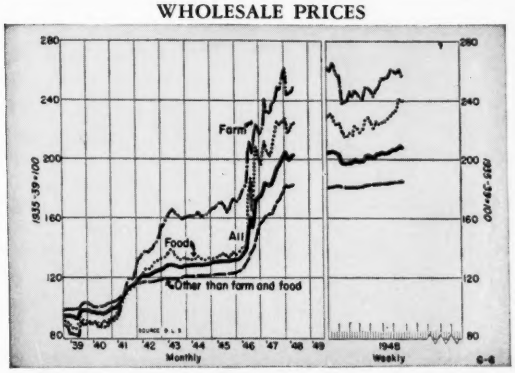
Business seems to accept this situation as an established fact. Purchasing agents expect higher prices at current levels of production and employment. Inventories are being kept at a reasonable ratio to sales.

Industrial activity in New England continued in June and July at about the same level as in May. Between-season dullness characterized many units in the textile, shoe, apparel, and jewelry industries in accordance with the reappearance of prewar seasonal patterns of operations. Many establishments are taking advantage of this seasonal dullness by closing down for mass vacations. Some textile manufacturers, feeling that the backlog of civilian demand is satisfied, are seeking to stabilize operations and to hedge against price uncertainties by turning more to Government orders.

Durable goods industries are faring better. Producers of silverware, electrical and special machinery are enjoying a large volume of orders. Machine tool producers are more optimistic. Metal fabricators, already hampered by shortages of raw metals, face new supply difficulties. The Mystic Iron Works, New England's sole producer of pig iron, has been forced to close temporarily. Also, the abandonment of the basing point pricing system by steel producers increases the uncertainty of having adequate steel supplies in the region at reasonable prices.

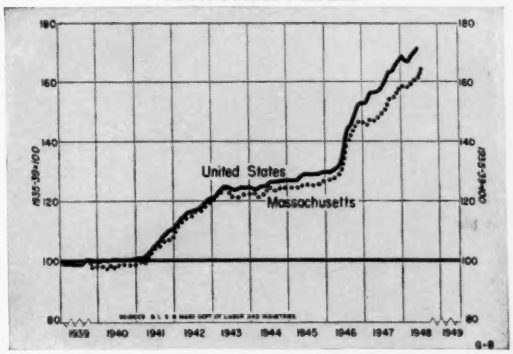
Department store trade and construction were brisk in June. Vacation business only awaited better weather. Industry in general looked forward to the customary uplift in autumn.

WHOLESALE PRICES



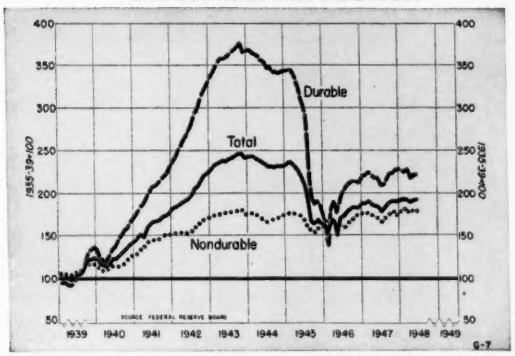
Wholesale commodity prices, as measured by the Bureau of Labor Statistics index, in July surpassed their 1920 peak and established a new all-time record. Prices of some foods and basic metals rose sharply, offsetting lower prices for grains and cotton . . .

CONSUMER PRICES



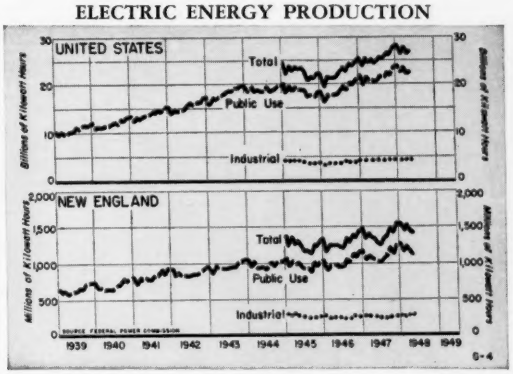
. . . Consumer prices were carried along by this upsurge. Already well above their 1920 peaks, they continued to soar even higher. Particularly sharp advances in meat prices caused many housewives to use meat very sparingly when they planned their menus.

INDUSTRIAL PRODUCTION



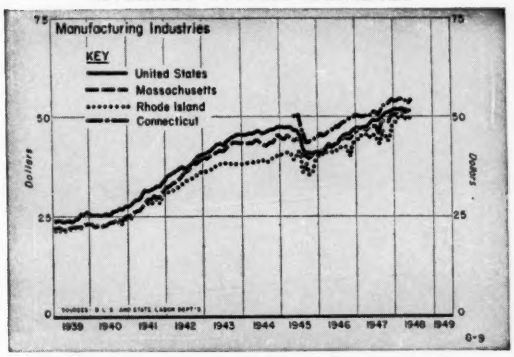
The supply of manufactured and mining products flowing into the market for producers and consumers is close to a peacetime record. Total industrial production is almost double its prewar volume, and few commodities are below their 1935-39 rates of production . . .

ELECTRIC ENERGY PRODUCTION



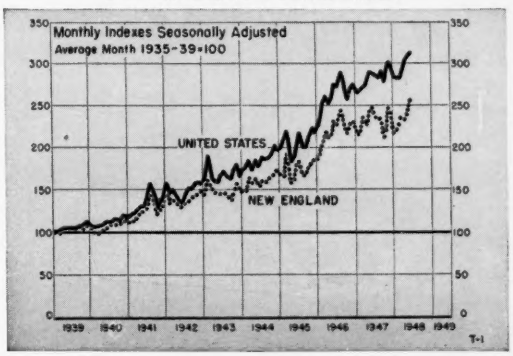
. . . The high level of industrial activity is also shown by the production of electric energy, the greater part of which is used for industrial and commercial purposes. Allowing for seasonal variations, the trend continues upward both in New England and in the nation.

AVERAGE WEEKLY EARNINGS



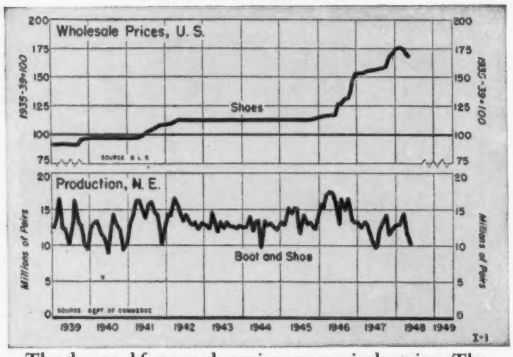
Effective demand for goods, however, remains immense. Personal income is high and steadily increasing. Average weekly earnings of manufacturing employees, for example, are over double their prewar levels, and have greatly enlarged individual purchasing power . . .

DEPARTMENT STORE SALES



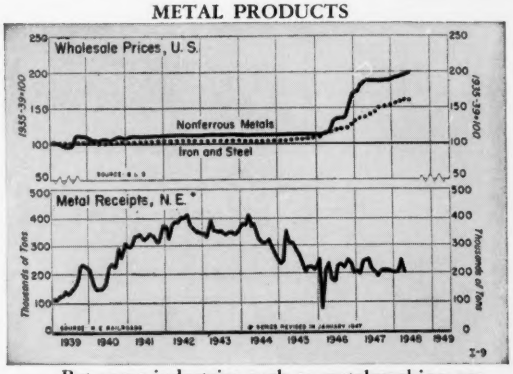
. . . The increased purchasing power resulting from higher income, available credit, and liquid assets sustains a very strong demand for goods. Department store sales, adjusted for seasonal variation, rebounded after a hesitant spring season to establish a new all-time peak in June.

SHOES AND LEATHER



The demand for goods varies among industries. The shoe industry met its war-created backlog of demand by a large 1946 production. Production and employment then fell back to balance a more normal demand, and prices have eased somewhat . . .

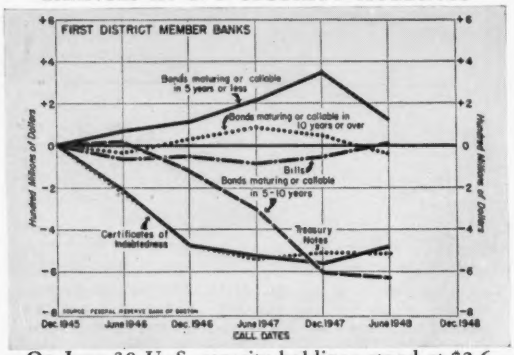
METAL PRODUCTS


Wholesale Prices, U. S.
1935-39=100
Nonferrous Metals
Iron and Steel
Metal Receipts, N. E.*
Thousands of Tons
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949

. . . But some industries such as metalworking are still far behind in meeting the demand for their products. New England producers are experiencing difficulty in receiving adequate metal supplies for fabrication, and prices continue to rise.

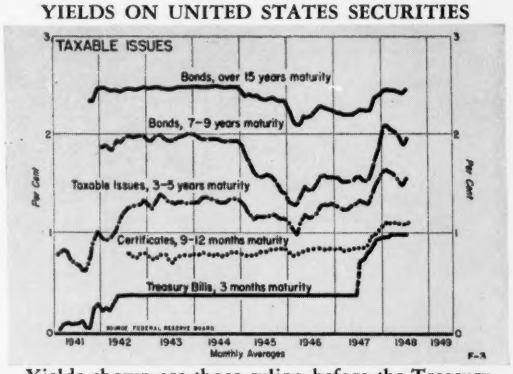
Banking and Finance

CHANGES IN U. S. SECURITY HOLDINGS


FIRST DISTRICT MEMBER BANKS
Bonds maturing or callable in 5 years or less
Bonds maturing or callable in 10 years or over
Bills
Bonds maturing or callable in 5-10 years
Certificates of Indebtedness
Treasury Notes
Hundred Millions of Dollars
Dec. 1945 June 1946 Dec. 1946 June 1947 Dec. 1947 June 1948 Dec. 1948
CALL DATES

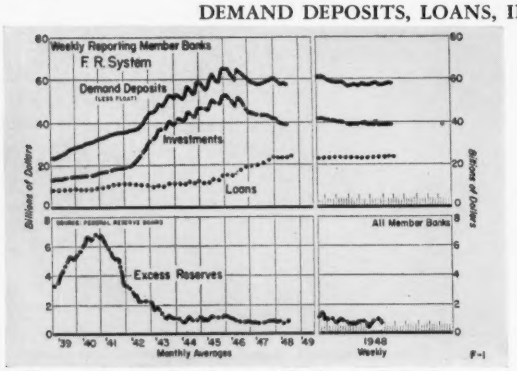
On June 30 U. S. security holdings stood at $2.6 billion, down $173 million from December. Maturities average about four years. Of the total decline in bonds those maturing or callable within five years accounted for about 70 per cent.

YIELDS ON UNITED STATES SECURITIES

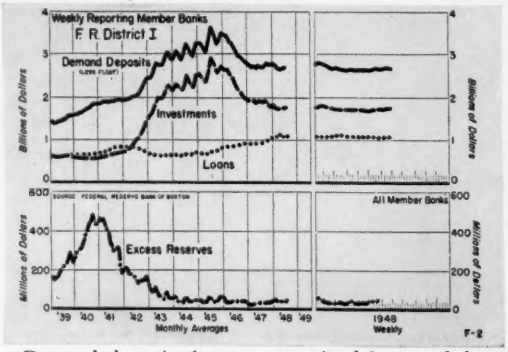

TAXABLE ISSUES
Bonds, over 15 years maturity
Bonds, 7-9 years maturity
Taxable Issues, 3-5 years maturity
Certificates, 9-12 months maturity
Treasury Bills, 3 months maturity
Per Cent
1941 1942 1943 1944 1945 1946 1947 1948 1949
Monthly Averages

Yields shown are those ruling before the Treasury announcement on August 9. In October new certificates will carry 1¼ per cent, up ⅛. Adjustment in prices of securities affected by the change in the one year borrowing rate has begun.

DEMAND DEPOSITS, LOANS, INVESTMENTS, AND RESERVES



Net purchases of U. S. securities by the F. R. System and gold imports offset losses of reserves arising from tax payments in June. Reserves increased in July. Business loans rose moderately during the last two months.



Demand deposits have not regained losses of the months of heavy tax payments. Commercial loans showed the first 1948 increase of any volume in June and July. Economic Cooperation Administration advances were included in the increase.